

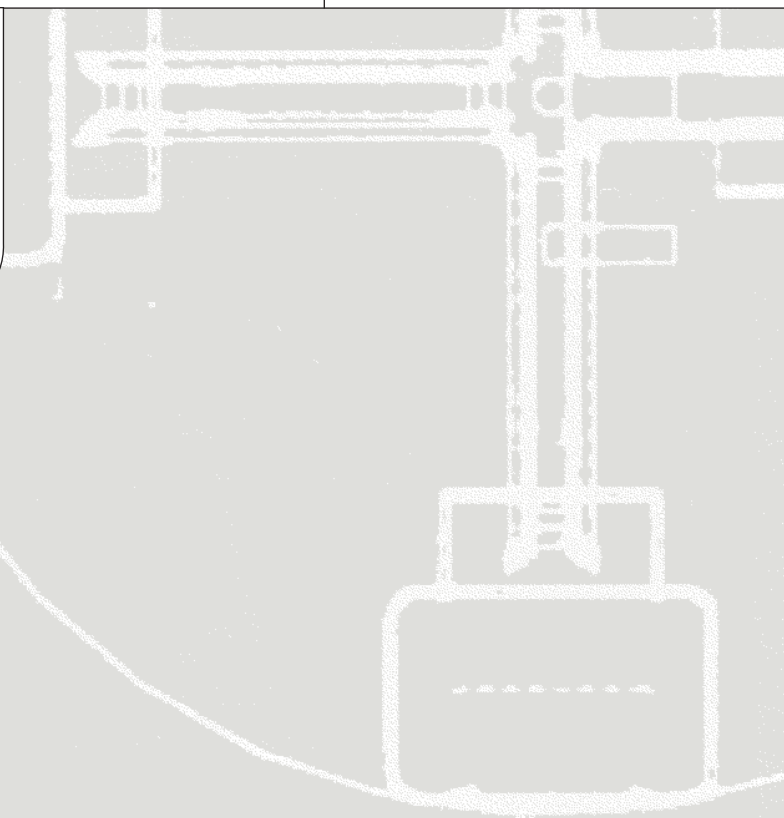


Operator's Manual

with Maintenance Information

Second Edition
First Printing
Part No. 82595

ZTM-45/25
ZTM-45/25J
DC Power



Important

Read, understand and obey these safety rules and operating instructions before operating this machine. Only trained and authorized personnel shall be permitted to operate this machine. This manual should be considered a permanent part of your machine and should remain with the machine at all times. If you have any questions, call Genie Industries.

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Safety Rules



Danger

Failure to obey the instructions and safety rules in this manual will result in death or serious injury.

Do Not Operate Unless:

- ☒ You learn and practice the principles of safe machine operation contained in this operator's manual.

1 Avoid hazardous situations.

Know and understand the safety rules before going on to the next section.

2 Always perform a pre-operation inspection.

3 Always perform function tests prior to use.

4 Inspect the workplace.

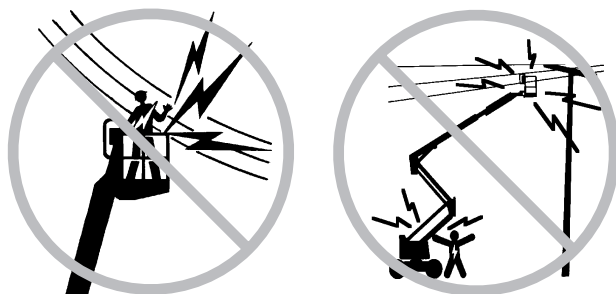
5 Only use the machine as it was intended.

- ☒ You read, understand and obey the manufacturer's instructions and safety rules—safety and operator's manuals and machine decals.
- ☒ You read, understand and obey employer's safety rules and worksite regulations.
- ☒ You read, understand and obey all applicable governmental regulations.
- ☒ You are properly trained to safely operate the machine.

SAFETY RULES

Electrocution Hazards

This machine is **not** electrically insulated and will **not** provide protection from contact with or proximity to electrical current.



Maintain safe distances from electrical power lines and apparatus in accordance with applicable governmental regulations and the following chart.

Voltage Phase to Phase	Minimum Safe Approach Distance	
	Feet	Meters
0 to 300V	Avoid Contact	
300V to 50KV	10	3.1
50KV to 200KV	15	4.6
200KV to 350KV	20	6.1
350KV to 500KV	25	7.6
500KV to 750KV	35	10.7
750KV to 1000KV	45	13.7

Allow for platform movement, electrical line sway or sag and beware of strong or gusty winds.

Keep away from the machine if it contacts energized power lines. Personnel on the ground or in the platform must not touch or operate the machine until energized power lines are shut off.

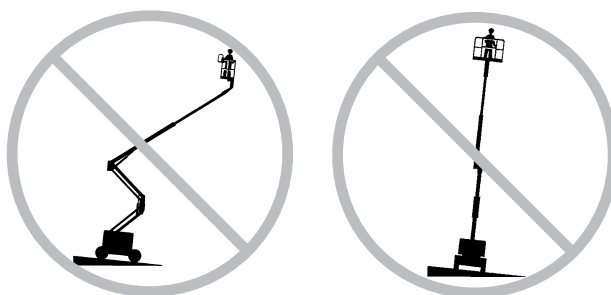
Do not use the machine as a ground for welding.

Do not operate the machine during lightning or storms.

Tip-over Hazards

Occupants, equipment and materials shall not exceed the maximum platform capacity.

Maximum platform capacity	500 lbs	227 kg
Maximum occupants	2	



Do not raise or extend the boom unless the machine is on a firm, level surface.

Do not depend on the tilt alarm as a level indicator. The tilt alarm sounds in the platform only when the machine is on a severe slope.

If the tilt alarm sounds:

Do not extend, rotate or raise the boom above horizontal. Move the machine to a firm, level surface before raising the platform. If the tilt alarm sounds when the platform is raised, use extreme caution to retract the boom and lower the platform. Do not rotate the boom while lowering. Move the machine to a firm, level surface before raising the platform.

Do not use the platform controls to free a platform that is caught, snagged or otherwise prevented from normal motion by an adjacent structure. All personnel must be removed from the platform before attempting to free the platform using the ground controls.

SAFETY RULES

Do not operate the machine in strong or gusty winds. Do not increase the surface area of the platform or the load. Increasing the area exposed to the wind will decrease machine stability.



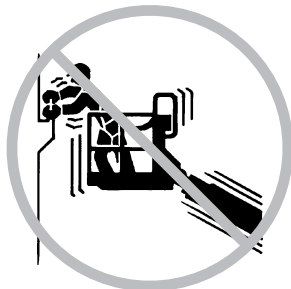
Use extreme care and slow speeds while driving the machine in the stowed position across uneven terrain, debris, unstable or slippery surfaces and near holes and drop-offs.

Do not drive the machine on or near uneven terrain, unstable surfaces or other hazardous conditions with the boom raised or extended.

Do not push off or pull toward any object outside of the platform.

**Maximum allowable
side force - ANSI & CSA**
150 lbs / 667 N

**Maximum allowable
side force - CE**
90 lbs / 400 N



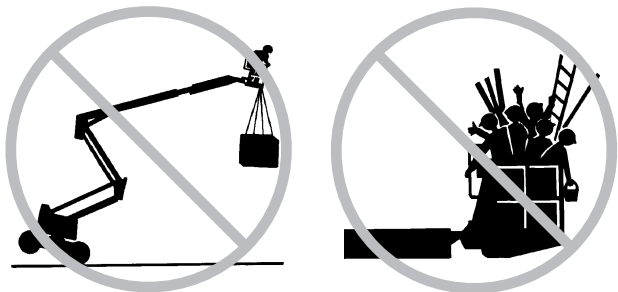
Do not alter or disable machine components that in any way affect safety and stability.

Do not alter or disable the limit switches.

Do not replace items critical to machine stability with items of different weight or specification.

Do not modify or alter an aerial work platform without prior written permission from the manufacturer. Mounting attachments for holding tools or other materials onto the platform, toeboards or guard rail system can increase the weight in the platform and the surface area of the platform or the load.

Do not place ladders or scaffolds in the platform or against any part of this machine.



Do not transport tools and materials unless they are evenly distributed and can be safely handled by person(s) in the platform.

Do not use the machine on a moving or mobile surface or vehicle.

Be sure all tires are in good condition, air-filled tires are properly inflated and lug nuts are properly tightened.

SAFETY RULES

Fall Hazards

Occupants must wear a safety belt or harness in accordance with governmental regulations. Attach the lanyard to the anchor provided in the platform.

Do not sit, stand or climb on the platform guard rails. Maintain a firm footing on the platform floor at all times.



Do not climb down from the platform when raised.



Keep the platform floor clear of debris.

Lower the platform entry mid-rail or close the entry gate before operating.

Component Damage Hazard

Do not use the machine as a ground for welding.

Collision Hazards

Be aware of limited sight distance and blind spots when driving or operating.

Be aware of the boom position when rotating the turntable.

Check the work area for overhead obstructions or other possible hazards.



Be aware of crushing hazards when grasping the platform guard rail.



Operators must comply with employer, job site and governmental rules regarding the use of personal protective equipment.

Do not lower the boom unless the area below is clear of personnel and obstructions.



Limit travel speed according to the condition of the ground surface, congestion, slope, location of personnel, and any other factors which may cause collision.

SAFETY RULES

Observe and use color-coded direction arrows on the platform controls and drive chassis for drive and steer functions.

Do not operate a boom in the path of any crane unless the controls of the crane have been locked out and/or precautions have been taken to prevent any potential collision.

No stunt driving or horseplay while operating a machine.

Bodily Injury Hazard

Do not operate the machine with a hydraulic oil or air leak. An air leak or hydraulic leak can penetrate and/or burn skin.

Always operate the machine in a well-ventilated area to avoid carbon monoxide poisoning.

Improper contact with components under any cover will cause serious injury. Only trained maintenance personnel should access compartments. Access by the operator is only advised when performing a pre-operation inspection. All compartments must remain closed and secured during operation.

Explosion and Fire Hazards

Do not start the engine if you smell or detect liquid petroleum gas (LPG), gasoline, diesel fuel or other explosive substances.

Do not refuel the machine with the engine running.

Refuel the machine and charge the batteries only in an open, well-ventilated area away from sparks, flames and lighted tobacco.

Do not operate the machine in hazardous locations or locations where potentially flammable or explosive gases or particles may be present.

Damaged Machine Hazards

Do not use a damaged or malfunctioning machine.

Conduct a thorough pre-operation inspection of the machine and test all functions before each work shift. Immediately tag and remove from service a damaged or malfunctioning machine.

Be sure all maintenance has been performed as specified in this manual and the *Genie Z-45/25 DC & Z-45/25J DC Service Manual*.

Be sure all decals are in place and legible.

Be sure the operator's, safety and responsibilities manuals are complete, legible and in the storage container located on the platform.

SAFETY RULES

Decal Legend

Genie product decals use symbols, color coding and signal words to identify the following:



Safety alert symbol—used to alert personnel to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



Red—used to indicate the presence of an imminently hazardous situation which, if not avoided, will result in death or serious injury.



Orange—used to indicate the presence of a potentially hazardous situation which, if not avoided, could result in death or serious injury.



Yellow with safety alert symbol—used to indicate the presence of a potentially hazardous situation which, if not avoided, may cause minor or moderate injury.



Yellow without safety alert symbol—used to indicate the presence of a potentially hazardous situation which, if not avoided, may result in property damage.



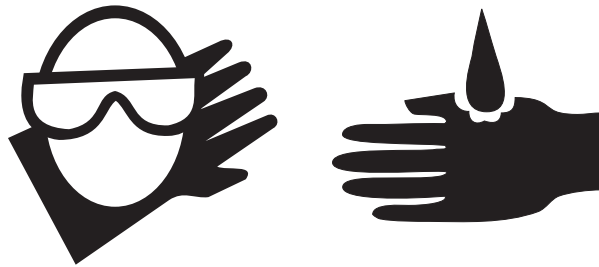
Green—used to indicate operation or maintenance information.

SAFETY RULES

Battery Safety

Burn Hazards

Batteries contain acid. Always wear protective clothing and eye wear when working with batteries.



Avoid spilling or contacting battery acid. Neutralize battery acid spills with baking soda and water.

The battery pack must remain in the upright position.

Do not expose the batteries or the charger to water or rain.

Explosion Hazards



Keep sparks, flames and lighted tobacco away from batteries. Batteries emit an explosive gas.

The battery pack cover must remain off during the entire charging cycle.

Do not contact the battery terminals or the cable clamps with tools that may cause sparks.

Component Damage Hazards

Do not use any battery charger greater than 48V to charge the batteries.

Both battery packs must be charged together.

Disconnect the battery pack plug before removing the battery pack.

Electrocution Hazards



Connect the battery charger to a grounded, AC 3-wire electrical outlet only.

Inspect daily for damaged cord, cables and wires. Replace damaged items before operating.

Avoid electrical shock from contact with battery terminals. Remove all rings, watches and other jewelry.

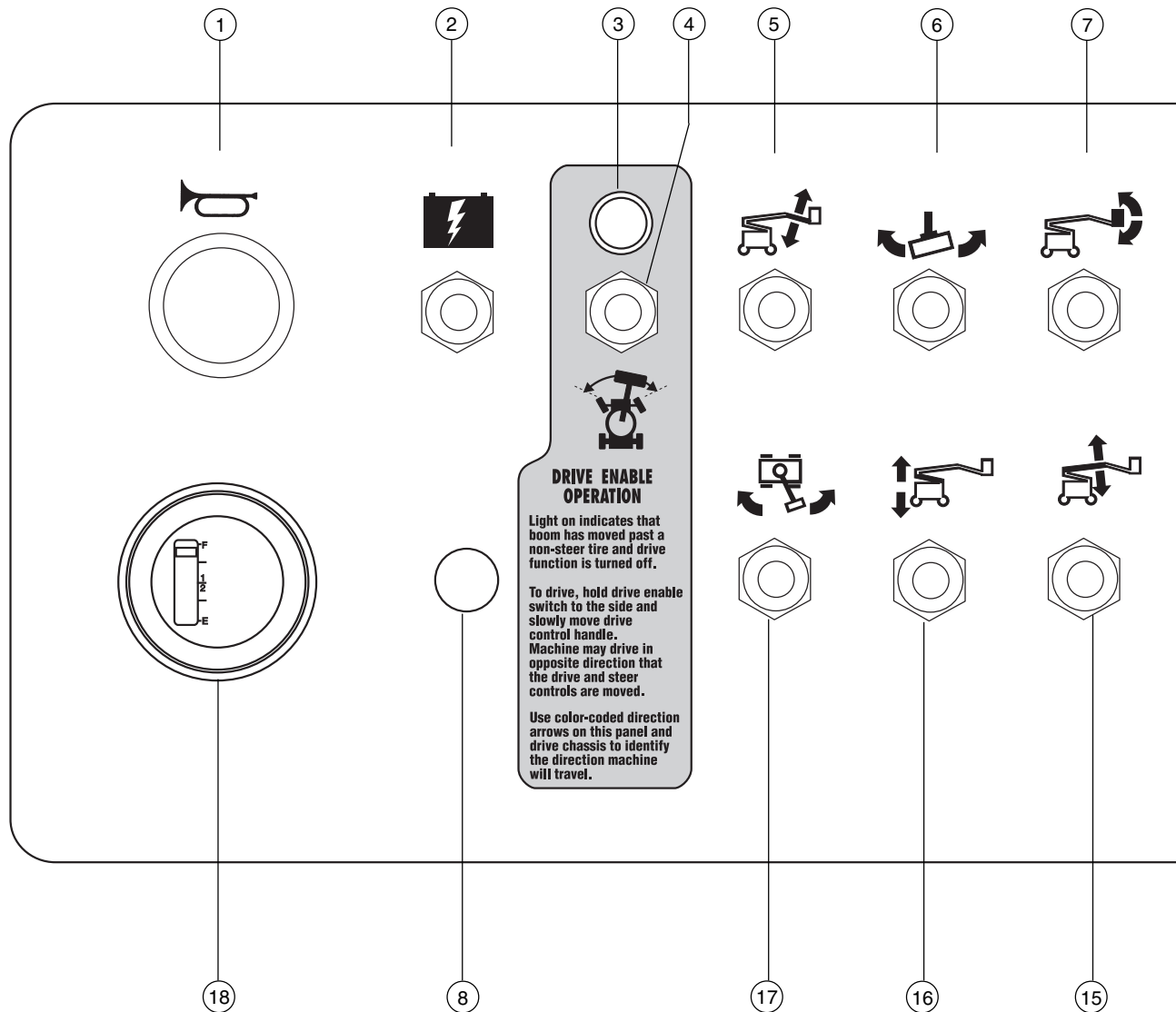
Tip-over Hazard

Do not use batteries that weigh less than the original equipment. Batteries are used as counterweight and are critical to machine stability. Each battery must weigh 88 lbs / 40 kg. Each battery box including batteries must weigh a minimum of 452 lbs / 205 kg.

Lifting Hazard

Use a forklift to remove or install the battery packs.

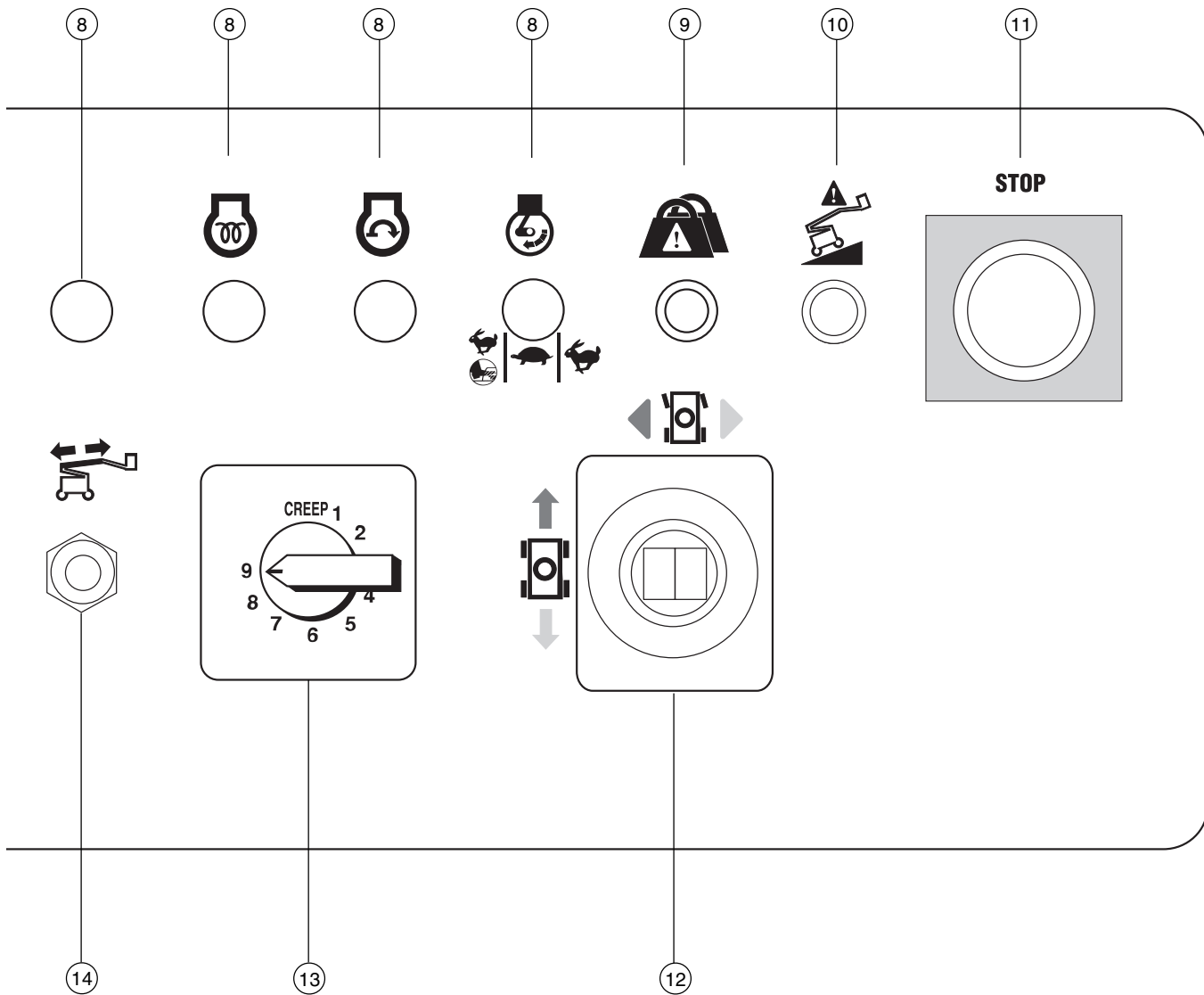
Controls



Platform Control Panel

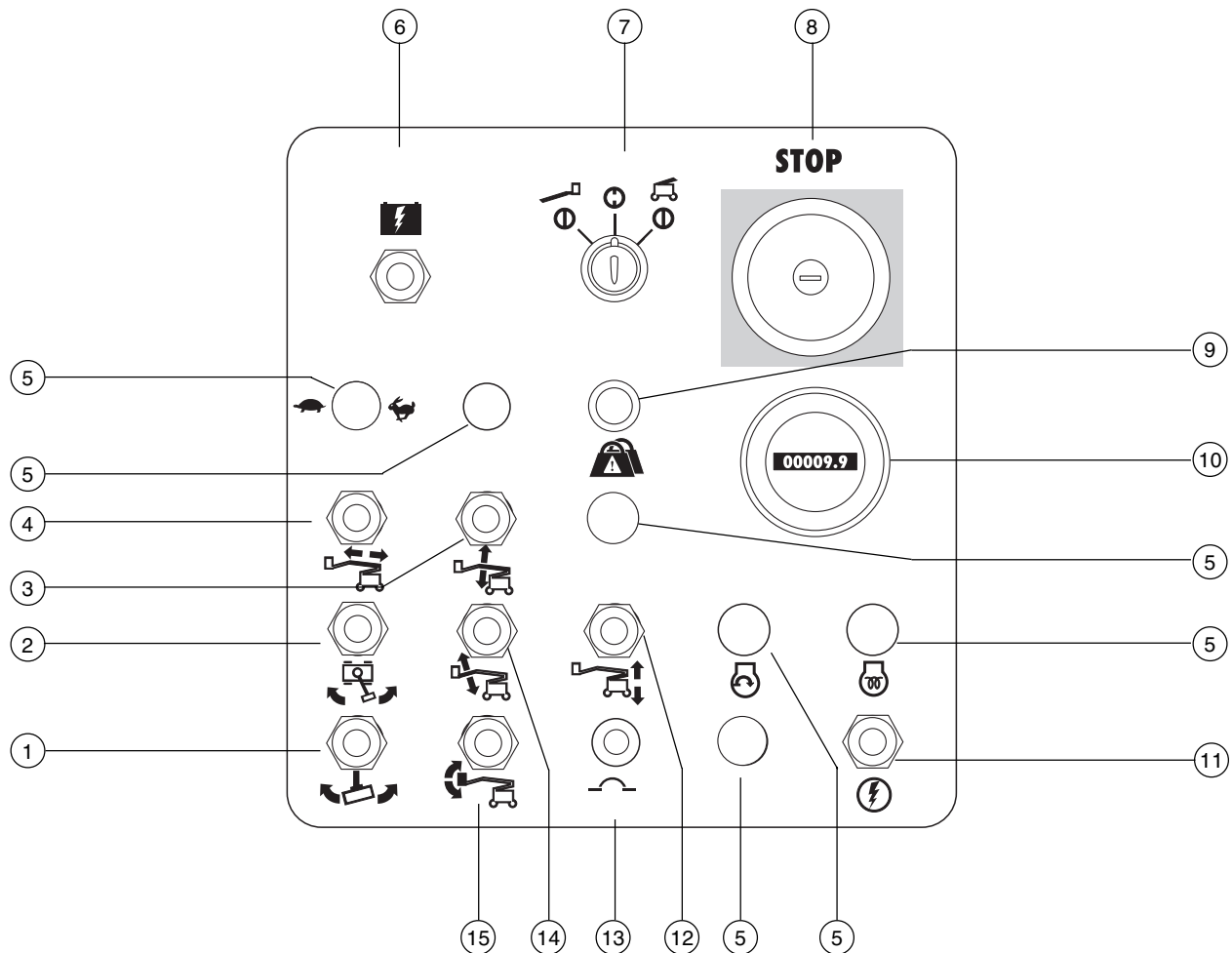
- | | |
|---|---|
| 1 Horn button | 7 Platform level switch |
| 2 Auxiliary power switch | 8 Not used |
| 3 Drive enable indicator light | 9 Platform overload indicator light (if equipped) |
| 4 Drive enable switch | 10 Machine not level indicator light (if equipped) |
| 5 Z-45/25J DC models: Jib boom up/down switch | 11 Red Emergency Stop button |
| 6 Platform rotate switch | 12 Proportional control handle for drive function and thumb rocker for steer function |

CONTROLS



- 13 Boom function speed controller
- 14 Primary boom extend/retract switch
- 15 Primary boom up/down switch
- 16 Secondary boom up/down switch
- 17 Turntable rotate switch
- 18 Battery charge indicator

CONTROLS

**Ground Control Panel**

- | | |
|--|---|
| 1 Platform rotate switch | 9 Platform overload indicator light (if equipped) |
| 2 Turntable rotate switch | 10 Hour meter |
| 3 Primary boom up/down switch | 11 Function enable switch |
| 4 Primary boom extend/retract switch | 12 Secondary boom up/down switch |
| 5 Not used | 13 10A breaker for control electrical circuits |
| 6 Auxiliary power switch | 14 Z-45/25J DC models: Jib boom up/down switch |
| 7 Key switch for platform/off/ground selection | 15 Platform level switch |
| 8 Red Emergency Stop button | |

Pre-operation Inspection



Do Not Operate Unless:

- ☑ You learn and practice the principles of safe machine operation contained in this operator's manual.

1 Avoid hazardous situations.

2 Always perform a pre-operation inspection.

Know and understand the pre-operation inspection before going on to the next section.

3 Always perform function tests prior to use.

4 Inspect the workplace.

5 Only use the machine as it was intended.

Fundamentals

It is the responsibility of the operator to perform a pre-operation inspection and routine maintenance.

The pre-operation inspection is a visual inspection performed by the operator prior to each work shift. The inspection is designed to discover if anything is apparently wrong with a machine before the operator performs the function tests.

The pre-operation inspection also serves to determine if routine maintenance procedures are required. Only routine maintenance items specified in this manual may be performed by the operator.

Refer to the list on the next page and check each of the items.

If damage or any unauthorized variation from factory delivered condition is discovered, the machine must be tagged and removed from service.

Repairs to the machine may only be made by a qualified service technician, according to the manufacturer's specifications. After repairs are completed, the operator must perform a pre-operation inspection again before going on to the function tests.

Scheduled maintenance inspections shall be performed by qualified service technicians, according to the manufacturer's specifications and the requirements listed in the responsibilities manual.

PRE-OPERATION INSPECTION

Pre-operation Inspection

- ☐ Be sure that the operator's, safety and responsibilities manuals are complete, legible and in the storage container located on the platform.
- ☐ Be sure that all decals are in place and legible. See Decals section.
- ☐ Check for hydraulic oil leaks and proper oil level. Add oil if needed. See Maintenance section.
- ☐ Check for battery fluid leaks and proper fluid level. Add distilled water if needed. See Maintenance section.
- ☐ Check for proper tire pressure. Add air if needed. See Maintenance section.

Check the following components or areas for damage, improperly installed or missing parts and unauthorized modifications:

- ☐ Electrical components, wiring and electrical cables
- ☐ Hydraulic power unit, hoses, fittings, cylinders and manifolds
- ☐ Hydraulic tanks
- ☐ Drive and turntable motors and torque hubs
- ☐ Boom wear pads
- ☐ Tires and wheels
- ☐ Limit switches, alarms and horn
- ☐ Nuts, bolts and other fasteners
- ☐ Platform entry mid-rail/gate

- ☐ Beacon and alarms (if equipped)

Check entire machine for:

- ☐ Cracks in welds or structural components
- ☐ Dents or damage to machine
- ☐ Be sure that all structural and other critical components are present and all associated fasteners and pins are in place and properly tightened.
- ☐ Be sure that both battery packs are in place and properly connected.
- ☐ After you complete your inspection, be sure that all compartment covers are in place and secured.

Maintenance



Observe and Obey:

- ☑ Only routine maintenance items specified in this manual shall be performed by the operator.
- ☑ Scheduled maintenance inspections shall be completed by qualified service technicians, according to the manufacturer's specifications and the requirements specified in the responsibilities manual.

Maintenance Symbols Legend

NOTICE

The following symbols have been used in this manual to help communicate the intent of the instructions. When one or more of the symbols appear at the beginning of a maintenance procedure, it conveys the meaning below.



Indicates that tools will be required to perform this procedure.



Indicates that new parts will be required to perform this procedure.

Check the Hydraulic Oil Level



Maintaining the hydraulic oil at the proper level is essential to machine operation. Improper hydraulic oil levels can damage hydraulic components. Daily checks allow the inspector to identify changes in oil level that might indicate the presence of hydraulic system problems.

- 1 Be sure that the boom is in the stowed position, then visually inspect the reservoir on the hydraulic power unit.
- ⦿ Result: The hydraulic oil level should be within the FULL and ADD marks on the hydraulic reservoir.

Hydraulic oil specifications

Hydraulic oil type	Chevron Rykon Premium MV equivalent
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MAINTENANCE

Check the Batteries



Proper battery condition is essential to good machine performance and operational safety. Improper fluid levels or damaged cables and connections can result in component damage and hazardous conditions.

⚠ WARNING Electrocution hazard. Contact with hot or live circuits could result in death or serious injury. Remove all rings, watches and other jewelry.

⚠ WARNING Bodily injury hazard. Batteries contain acid. Avoid spilling or contacting battery acid. Neutralize battery acid spills with baking soda and water.

NOTICE Perform this test after fully charging the batteries.

- 1 Put on protective clothing and eye wear.
- 2 Be sure that the battery cable connections are tight and free of corrosion.
- 3 Remove the battery vent caps.
- 4 Check the battery acid level. If needed, replenish with distilled water to the bottom of the battery fill tube. Do not overfill.
- 5 Install the vent caps.

Check the Tire Pressure



⚠ DANGER Tip-over hazard. An over-inflated tire can explode which may compromise machine stability and cause the machine to tip over.

⚠ DANGER Tip-over hazard. The use of temporary flat tire repair products may lead to tire failure which could compromise machine stability and cause the machine to tip over.

⚠ WARNING Bodily injury hazard. An over-inflated tire can explode and may cause death or serious injury.

NOTICE This procedure does not need to be performed on machines equipped with foam-filled tires.

- 1 Check each tire with an air pressure gauge and add air as needed.

Tire pressure	100 psi	6.9 bar
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Scheduled Maintenance

Maintenance performed quarterly, annually and every two years must be completed by a person trained and qualified to perform maintenance on this machine according to the procedures found in the service manual for this machine.

Machines that have been out of service for more than three months must receive the quarterly inspection before they are put back into service.

Function Tests



Do Not Operate Unless:

- ☑ You learn and practice the principles of safe machine operation contained in this operator's manual.

1 Avoid hazardous situations.

2 Always perform a pre-operation inspection.

3 Always perform function tests prior to use.

Know and understand the function tests before going on to the next section.

4 Inspect the workplace.

5 Only use the machine as it was intended.

Fundamentals

The function tests are designed to discover any malfunctions before the machine is put into service. The operator must follow the step-by-step instructions to test all machine functions.

A malfunctioning machine must never be used. If malfunctions are discovered, the machine must be tagged and removed from service. Repairs to the machine may only be made by a qualified service technician, according to the manufacturer's specifications.

After repairs are completed, the operator must perform a pre-operation inspection and function tests again before putting the machine into service.

FUNCTION TESTS

- 1 Select a test area that is firm, level and free of obstruction.

At the Ground Controls

- 2 Turn the key switch to ground control.
 - 3 Pull out the red Emergency Stop button to the on position.
- ⦿ Result: The beacon (if equipped) should flash.

Test Emergency Stop

- 4 Push in the red Emergency Stop button to the off position.
- ⦿ Result: All functions should not operate.
- 5 Pull out the red Emergency Stop button to the on position.

Test the Machine Functions

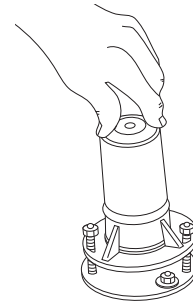
- 6 Do not hold the function enable switch to either side. Attempt to activate each boom and platform function toggle switch.
- ⦿ Result: All boom and platform functions should not operate.
- 7 Hold the function enable switch to either side and activate each boom and platform function toggle switch.
- ⦿ Result: All boom and platform functions should operate through a full cycle. The descent alarm (if equipped) should sound while the boom is lowering.



Machines equipped with Platform Level Control Disable Function: The platform level toggle switch will not operate when the primary boom is raised past the drive speed limit switch.

Test the Tilt Sensor

- 8 Turn the key switch to platform control. Pull out the platform red Emergency Stop button to the on position.
 - 9 Open the turntable cover on the side opposite the ground controls and locate the tilt sensor to the right of the hydraulic pump.
 - 10 Press down one side of the tilt sensor and hold for 5 seconds.
- ⦿ Result: The alarm, located in the platform, should sound.

**Test Auxiliary Controls**

- 11 Turn the key switch to ground control.
- 12 Pull out the red Emergency Stop button to the on position.
- 13 Simultaneously hold the auxiliary power switch on and activate each boom function toggle switch.



Note: To conserve battery power, test each function through a partial cycle.

- ⦿ Result: All boom functions should operate.

FUNCTION TESTS

At the Platform Controls

Test Emergency Stop

- 14 Push in the platform red Emergency Stop button to the off position.
- 15 Activate each machine function control handle or toggle switch.
- ⦿ Result: No functions should operate.
- 16 Pull out the red Emergency Stop button to the on position.

Test the Horn

- 17 Push the horn button.
- ⦿ Result: The horn should sound.

Test the Foot Switch

- 18 Do not press down the foot switch and test each machine function.
- ⦿ Result: The machine functions should not operate.

Test Machine Functions

- 19 Press down the foot switch.
- 20 Activate each machine function control handle or toggle switch.
- ⦿ Result: All boom/platform functions should operate through a full cycle.

Note: Control the speed of boom functions by adjusting the boom function speed controller. Drive and steer functions are not affected by the boom function speed controller.

Machines equipped with Platform Level Control Disable Function: The platform level toggle switch will not operate when the primary boom is raised past the drive speed limit switch.

Test the Steering

- 21 Press down the foot switch.
- 22 Depress the thumb rocker switch on top of the drive control handle in the direction identified by the blue triangle on the control panel.
- ⦿ Result: The steer wheels should turn in the direction that the blue triangles point on the drive chassis.
- 23 Depress the thumb rocker switch in the direction identified by the yellow triangle on the control panel.
- ⦿ Result: The steer wheels should turn in the direction that the yellow triangles point on the drive chassis.

FUNCTION TESTS

Test Drive and Braking

24 Press down the foot switch.

25 Slowly move the drive control handle in the direction indicated by the blue arrow on the control panel until the machine begins to move, then return the handle to the center position.

- ⦿ Result: The machine should move in the direction that the blue arrow points on the drive chassis, then come to an abrupt stop.

26 Slowly move the drive control handle in the direction indicated by the yellow arrow on the control panel until the machine begins to move, then return the handle to the center position.

- ⦿ Result: The machine should move in the direction that the yellow arrow points on the drive chassis, then come to an abrupt stop.

Note: The brakes must be able to hold the machine on any slope it is able to climb.

Test Limited Drive Speed

27 Press down the foot switch.

28 Raise the primary boom approximately 2 feet / 61 cm.

29 Slowly move the drive control handle to the full drive position.

- ⦿ Result: The maximum achievable drive speed with the primary boom raised should not exceed 1 foot / 30 cm per second.

30 Lower the primary boom to the stowed position.

31 Raise the secondary boom approximately 2 feet / 61 cm.

32 Slowly move the drive control handle to the full drive position.

- ⦿ Result: The maximum achievable drive speed with the secondary boom raised should not exceed 1 foot / 30 cm per second.

33 Lower the secondary boom to the stowed position.

34 Extend the primary boom approximately 1 foot / 30 cm.

35 Slowly move the drive control handle to the full drive position.

- ⦿ Result: The maximum achievable drive speed with the primary boom extended should not exceed 1 foot / 30 cm per second.

36 Retract the boom.

If the drive speed with the primary boom raised, the secondary boom raised or the primary boom extended exceeds 1 foot / 30 cm per second, immediately tag and remove the machine from service.

FUNCTION TESTS

Test the Drive Enable System

37 Press down the foot switch and lower the boom to the stowed position.

38 Rotate the turntable until the primary boom moves past one of the non-steer wheels.

- ⦿ Result: The drive enable indicator light should come on and remain on while the boom is anywhere in the range shown.



39 Move the drive control handle off center.

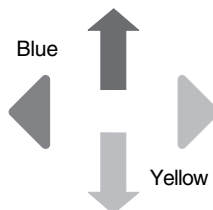
- ⦿ Result: The drive function should not operate.

40 Move and hold the drive enable toggle switch to either side and slowly move the drive control handle off center.

- ⦿ Result: The drive function should operate.

Note: When the drive enable system is in use, the machine may drive in the opposite direction that the drive and steer control handle is moved.

Use the color-coded direction arrows on the platform controls and the drive chassis to identify the direction of travel.

**Test Auxiliary Controls**

41 Pull out the red Emergency Stop button to the on position.

42 Press down the foot switch.

43 Simultaneously hold the auxiliary power switch on and activate each function control handle or toggle switch.

Note: To conserve battery power, test each function through a partial cycle.

- ⦿ Result: All boom and steer functions should operate. Drive functions should not operate with auxiliary power.

Test the Lift/Drive Select Function (if equipped)

44 Press down the foot switch.

45 Move the drive control handle off center and activate a boom function toggle switch.

- ⦿ Result: No boom functions should operate. The machine will move in the direction indicated on the control panel.

Workplace Inspection



Do Not Operate Unless:

- ☒ You learn and practice the principles of safe machine operation contained in this operator's manual.

- 1 Avoid hazardous situations.
- 2 Always perform a pre-operation inspection.
- 3 Always perform function tests prior to use.

4 Inspect the workplace.

Know and understand the workplace inspection before going on to the next section.

- 5 Only use the machine as it was intended.

Workplace Inspection

Be aware of and avoid the following hazardous situations:

- drop-offs or holes
- bumps, floor obstructions or debris
- sloped surfaces
- unstable or slippery surfaces
- overhead obstructions and high voltage conductors
- hazardous locations
- inadequate surface support to withstand all load forces imposed by the machine
- wind and weather conditions
- the presence of unauthorized personnel
- other possible unsafe conditions

Fundamentals

The workplace inspection helps the operator determine if the workplace is suitable for safe machine operation. It should be performed by the operator prior to moving the machine to the workplace.

It is the operator's responsibility to read and remember the workplace hazards, then watch for and avoid them while moving, setting up and operating the machine.

Operating Instructions



Do Not Operate Unless:

- ☑ You learn and practice the principles of safe machine operation contained in this operator's manual.

- 1 Avoid hazardous situations.
- 2 Always perform a pre-operation inspection.
- 3 Always perform function tests prior to use.
- 4 Inspect the workplace.
- 5 **Only use the machine as it was intended.**

Fundamentals

The Operating Instructions section provides instructions for each aspect of machine operation. It is the operator's responsibility to follow all the safety rules and instructions in the operator's, safety and responsibilities manuals.

Using the machine for anything other than lifting personnel, along with their tools and materials, to an aerial work site is unsafe and dangerous.

Only trained and authorized personnel should be permitted to operate a machine. If more than one operator is expected to use a machine at different times in the same work shift, they must all be qualified operators and are all expected to follow all safety rules and instructions in the operator's, safety and responsibilities manuals. That means every new operator should perform a pre-operation inspection, function tests, and a workplace inspection before using the machine.

Emergency Stop

Push in either ground or platform red Emergency Stop button to the off position to stop all functions and turn the engine off.

Repair any function that operates when the red Emergency Stop button is pushed in.

Selecting and operating the ground controls will override the platform red Emergency Stop button.

Auxiliary Controls

Use auxiliary power if the primary power source fails.

- 1 Turn the key switch to ground or platform control.
- 2 Pull out the red Emergency Stop button to the on position.
- 3 Press down the foot switch when operating the auxiliary controls from the platform.
- 4 Simultaneously hold the auxiliary power switch on and activate the desired function.



The drive function will not operate with auxiliary power.

OPERATING INSTRUCTIONS

Operation from Ground

- 1 Turn the key switch to ground control.
- 2 Pull out the red Emergency Stop button to the on position.

To Position Platform

- 1 Hold the function enable switch to either side.
- 2 Move the appropriate toggle switch according to the markings on the control panel.



The drive and steer functions are not available from the ground controls.

Machines equipped with Platform Level Control Disable Function: The platform level toggle switch will not operate when the primary boom is raised past the drive speed limit switch.

Operation from Platform

- 1 Turn the key switch to platform control.
- 2 Pull out both ground and platform red Emergency Stop buttons to the on position.

To Position Platform

- 1 Press down the foot switch.
- 2 Slowly move the appropriate function control handle or toggle switch according to the markings on the control panel.

Machines equipped with Platform Level Control Disable Function: The platform level toggle switch will not operate when the primary boom is raised past the drive speed limit switch.

To Steer

- 1 Press down the foot switch.
- 2 Turn the steer wheels with the thumb rocker switch located on top of the drive control handle.

Use the color-coded direction triangles on the platform controls and the drive chassis to identify the direction the wheels will turn.

To Drive

- 1 Press down the foot switch.
- 2 Increase speed: Slowly move the drive control handle off center.
Decrease speed: Slowly move the drive control handle toward center.
Stop: Return the drive control handle to center or release the foot switch.

Use the color-coded direction arrows on the platform controls and the drive chassis to identify the direction the machine will travel.

Machine travel speed is restricted when the booms are raised.

OPERATING INSTRUCTIONS

Drive Enable

Light on indicates that the boom has moved just past either non-steer wheel and the drive function has been interrupted.



To drive, hold the drive enable switch to either side and slowly move the drive control handle off center.

Be aware that the machine may move in the opposite direction that the drive and steer controls are moved.

Always use the color-coded direction arrows on the platform controls and the drive chassis to identify the direction the machine will travel.

Controller Fault Indicator Light On

If the controller fault indicator light is on, push in the red Emergency Stop button, wait a few seconds and pull out the red Emergency Stop button to reset the system.

If the light stays on, tag and remove the machine from service.

Platform Overload Indicator Light (if equipped)

Light flashing indicates the platform is overloaded and no functions will operate.

Remove weight from the platform until the light goes off.

Machine Not Level Indicator Light (if equipped)

Light on indicates the machine is not level. The tilt alarm will be sounding when this light is on. Move the machine to a firm level surface.

Fall Protection

Personal fall protection equipment (PFPE) is required when operating this machine.

All PFPE must comply with applicable governmental regulations, and must be inspected and used in accordance with the PFPE manufacturer's instructions.

After Each Use

- 1 Select a safe parking location—firm level surface, clear of obstruction and traffic.
- 2 Retract and lower the boom to the stowed position.
- 3 Rotate the turntable so that the boom is between the non-steer wheels.
- 4 Turn the key switch to the off position and remove the key to secure from unauthorized use.
- 5 Chock the wheels.
- 6 Charge the batteries (if necessary).

OPERATING INSTRUCTIONS

**Battery and Charger Instructions****Observe and Obey:**

- ☒ Do not use an external charger or booster battery.
- ☒ Charge the battery in a well-ventilated area.
- ☒ Use proper AC input voltage for charging as indicated on the charger.
- ☒ Use only a Genie authorized battery and charger.

To Charge Battery

- 1 Be sure the batteries are connected before charging the batteries.
- 2 Open the battery compartment. The compartment should remain open for the entire charging cycle.
- 3 Remove the battery vent caps and check the battery acid level. If necessary, add only enough distilled water to cover the plates. Do not overfill prior to the charge cycle.
- 4 Replace the battery vent caps.
- 5 Connect the battery charger to a grounded AC circuit.
- 6 Turn the battery charger on.
- 7 The charger will indicate when the battery is fully charged.
- 8 Check the battery acid level when the charging cycle is complete. Replenish with distilled water to the bottom of the fill tube. Do not overfill.

Dry Battery Filling and Charging Instructions

- 1 Remove the battery vent caps and permanently remove the plastic seal from the battery vent openings.
- 2 Fill each cell with battery acid (electrolyte) until the level is sufficient to cover the plates.

Do not fill to the maximum level until the battery charge cycle is complete. Overfilling can cause the battery acid to overflow during charging. Neutralize battery acid spills with baking soda and water.

- 3 Install the battery vent caps.
- 4 Charge the battery.
- 5 Check the battery acid level when the charging cycle is complete. Replenish with distilled water to the bottom of the fill tube. Do not overfill.

Transport and Lifting Instructions



Observe and Obey:

- ☑ The transport vehicle must be parked on a level surface.
- ☑ The transport vehicle must be secured to prevent rolling while the machine is being loaded.
- ☑ Be sure the vehicle capacity, loading surfaces and chains or straps are sufficient to withstand the machine weight. See the serial plate for the machine weight.
- ☑ The machine must be on a level surface or secured before releasing the brakes.
- ☑ Be sure the turntable is secured with the turntable rotation lock before transporting. Be sure to unlock the turntable for operation.

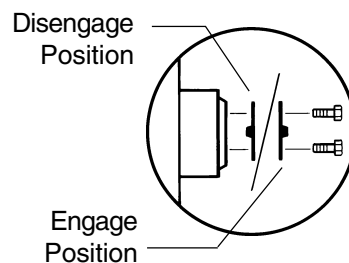
Free-wheel Configuration for Winching

- 1 Chock the wheels to prevent the machine from rolling.
- 2 Release the non-steer wheel brakes by turning over the drive hub disconnect caps.
- 3 Be sure the winch line is properly secured to the drive chassis tie points and the path is clear of all obstructions.

After the machine is loaded:

- 1 Chock the wheels to prevent the machine from rolling.
- 2 Apply the non-steer wheel brakes by turning over the drive hub disconnect caps.

Towing a Genie Z-45/25 DC or a Z-45/25J DC machine is not recommended. If the machine must be towed, do not exceed 2 mph / 3.2 km/h.



TRANSPORT AND LIFTING INSTRUCTIONS

Securing to Truck or Trailer for Transit

Always chock the machine wheels in preparation for transport.

Turn the key switch to the off position and remove the key before transporting.

Inspect the entire machine for loose or unsecured items.

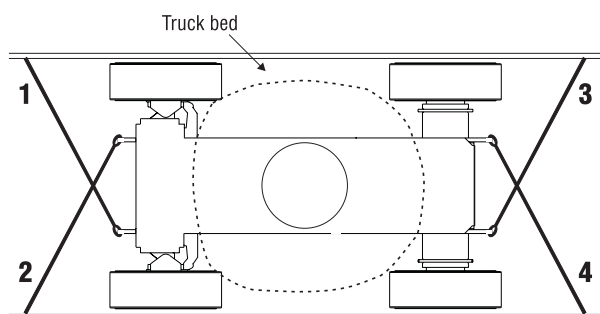
Securing the Chassis

Use the tie points on the drive chassis for anchoring down to the transport surface.

Use chains or straps of ample load capacity.

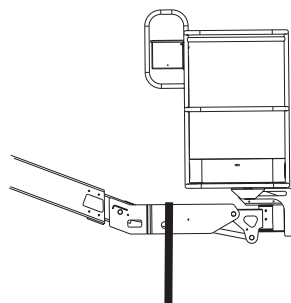
Use a minimum of 4 chains.

Adjust the rigging to prevent damage to the chains.

**Securing the Platform - Z-45/25**

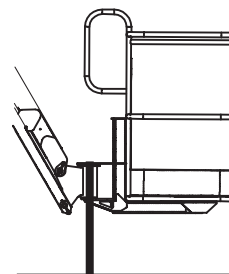
Make sure the platform is in the stowed position.

Secure the platform with a nylon strap placed over the platform mount near the platform rotator (see below). Do not use excessive downward force when securing the boom section.

**Securing the Platform - Z-45/25J**

Make sure the jib and platform are in the stowed position.

Secure the platform with a nylon strap placed over the platform mount near the platform rotator (see below). Do not use excessive downward force when securing the boom section.



TRANSPORT AND LIFTING INSTRUCTIONS

**Observe and Obey:**

- ☑ Only qualified riggers should rig and lift the machine.
- ☑ Be sure the crane capacity, loading surfaces and straps or lines are sufficient to withstand the machine weight. See the serial plate for the machine weight.

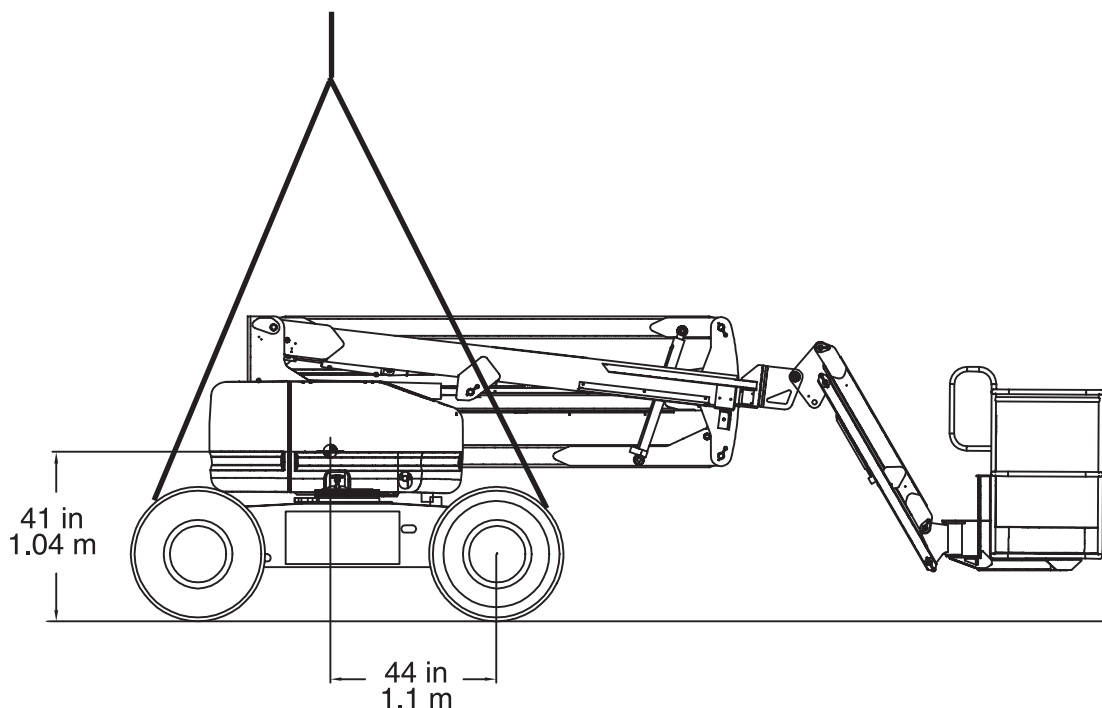
Lifting Instructions

Fully lower and retract the boom. Fully lower the jib (if equipped). Remove all loose items on the machine.

Determine the center of gravity of your machine using the picture on this page.

Attach the rigging only to the designated lifting points on the machine. There are four lifting points on the chassis.

Adjust the rigging to prevent damage to the machine and to keep the machine level.



Decals

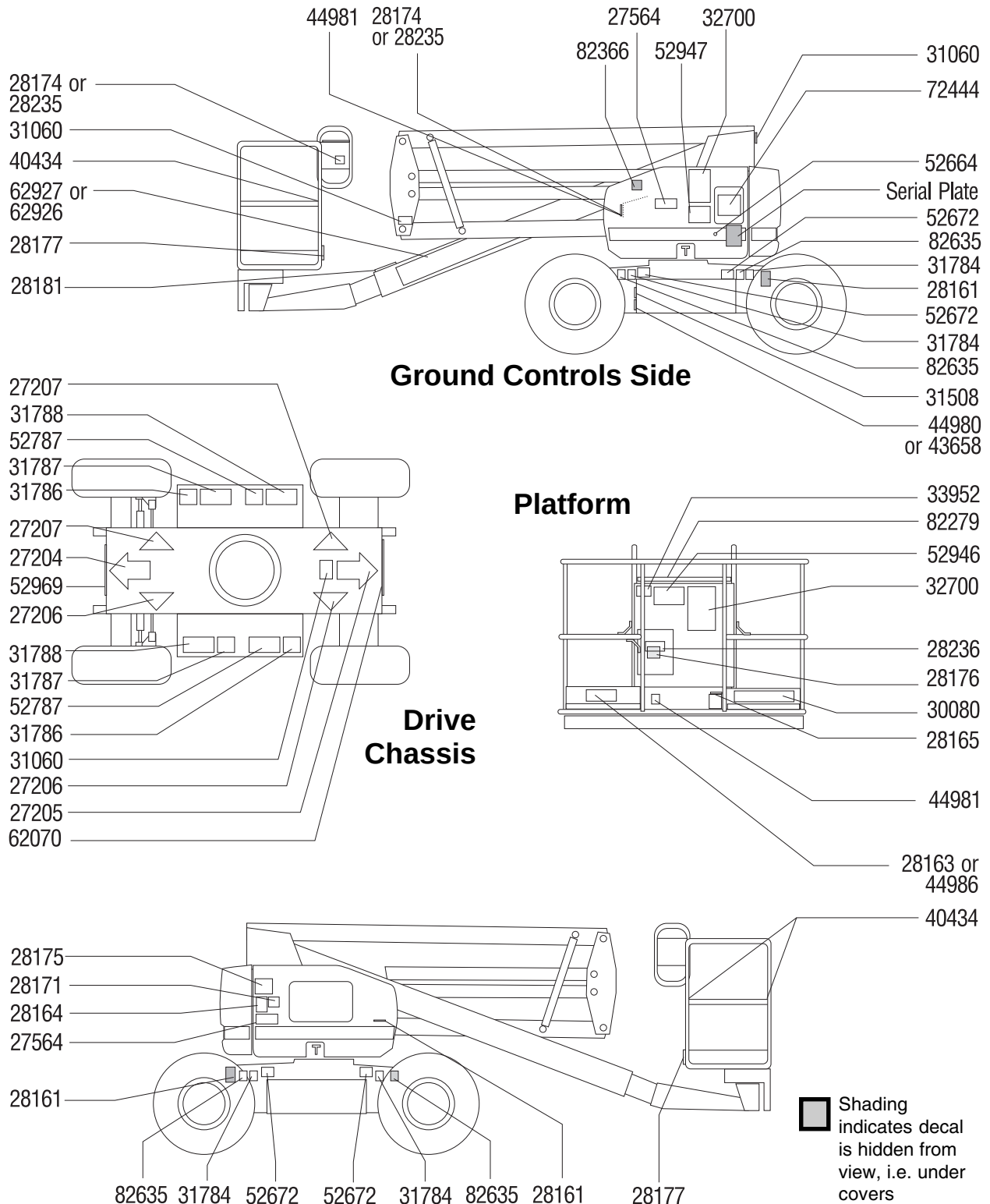
Inspection for Decals with Words

Determine whether the decals on your machine have words or symbols. Use the appropriate inspection to verify that all decals are legible and in place.

Part No.	Decal Description	Quantity
27204	Arrow - Blue	1
27205	Arrow - Yellow	1
27206	Triangle- Blue	2
27207	Triangle - Yellow	2
27564	Danger - Electrocution Hazard	2
28161	Warning - Crushing Hazard	3
28163	Notice - Max Side Force, 150 lbs / 667N	1
28164	Notice - Hazardous Materials	1
28165	Notice - Foot Switch	1
28171	Label - No Smoking	1
28174	Label - Power to Platform, 230V	2
28175	Caution - Compartment Access	1
28176	Notice - Missing Manuals	1
28177	Warning - Platform Rotate	2
28181	Warning - No Step or Ride	1
28235	Label - Power to Platform, 115V	2
28236	Warning - Failure To Read . . .	1
30080	Notice - Maximum Load, 500 lbs / 227 kg	1
31060	Danger - Tip-over Hazard, Interlock	3
31508	Notice - Power to Charger	1
31784	Label - Tire Pressure	4
31786	Notice - Connection Diagram	2
31787	Danger - Tip-over Hazard	2
31788	Danger - Battery Safety	2
32700	Danger - Safety Rules	2

Part No.	Decal Description	Quantity
33952	Danger - Tilt-Alarm	1
40434	Label - Lanyard Anchorage	3
43658	Label - Power to Charger, 230V	1
44980	Label - Power to Charger, 115V	1
44981	Label - Air Line to Platform	2
44986	Notice - Max Manual Force, 90 lbs / 400N	1
52664	Label - Controller Status Indicator Light	1
52672	Danger - Tip-over Hazard, Tires	4
52787	Notice - Charger Operating Instructions	2
52946	Notice - Operating Instructions, Platform	1
52947	Notice - Operating Instructions, Ground	1
52969	Cosmetic - Genie Boom	1
62070	Cosmetic - DC Power	1
62926	Cosmetic - Genie Z-45/25J	1
62927	Cosmetic - Genie Z-45/25	1
72444	Ground Control Panel	1
82279	Platform Control Panel	1
82366	Label - Chevron Rykon	1
82635	Label - Wheel Load, Z-45/25 DC	4

DECALS



DECALS

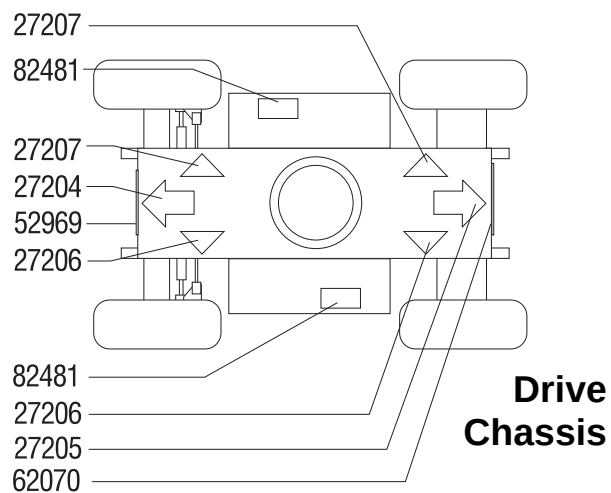
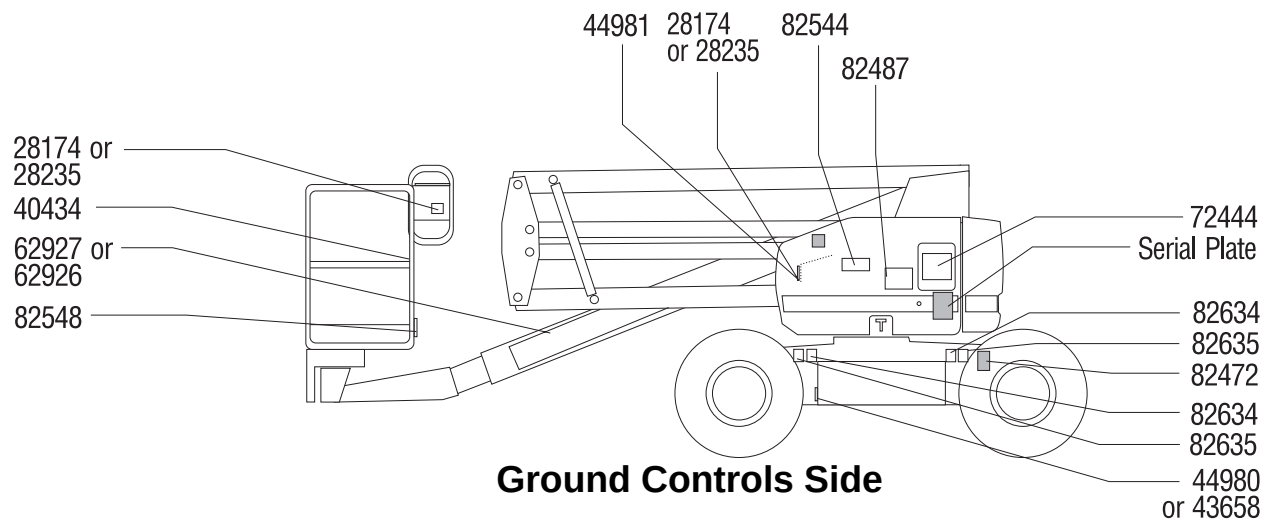
Inspection for Decals with Symbols

Determine whether the decals on your machine have words or symbols. Use the appropriate inspection to verify that all decals are legible and in place.

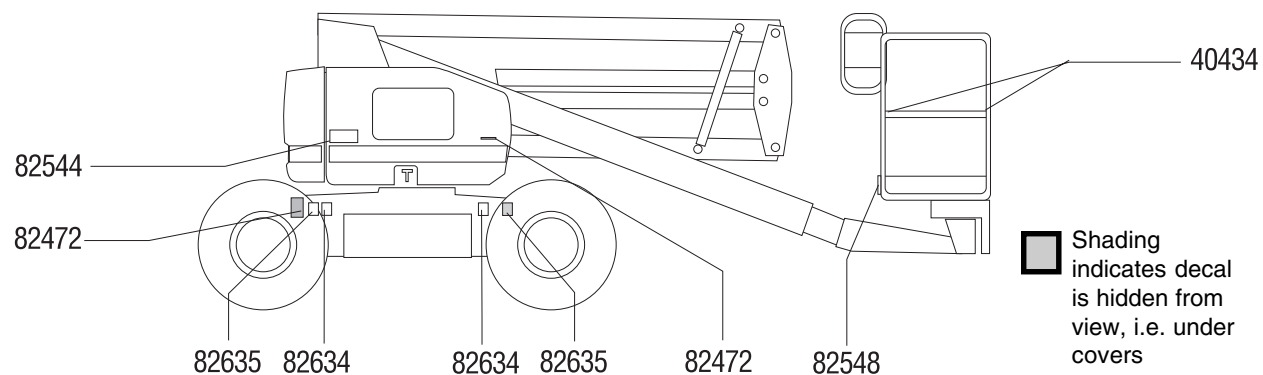
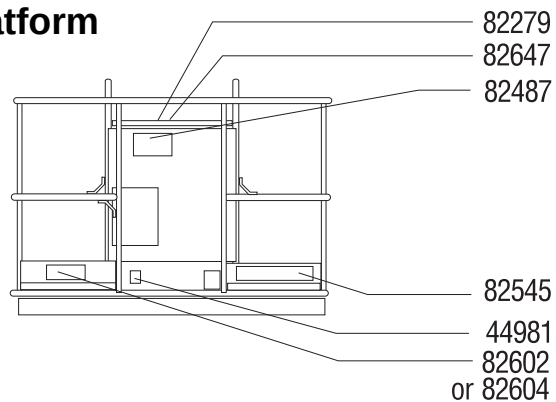
Part No.	Decal Description	Quantity
27204	Arrow - Blue	1
27205	Arrow - Yellow	1
27206	Triangle- Blue	2
27207	Triangle - Yellow	2
28174	Label - Power to Platform, 230V	2
28235	Label - Power to Platform, 115V	2
40434	Label - Lanyard Anchorage	3
43658	Label - Power to Charger, 230V	1
44980	Label - Power to Charger, 115V	1
44981	Label - Air Line to Platform	2
52969	Cosmetic - Genie Boom	1
62070	Cosmetic - DC Power	1
62926	Cosmetic - Genie Z-45/25J	1
62927	Cosmetic - Genie Z-45/25	1

Part No.	Decal Description	Quantity
72444	Ground Control Panel	1
82279	Platform Control Panel	1
82472	Warning - Crushing Hazard	3
82473	Caution - Compartment Access	1
82481	Danger - Battery Safety	2
82487	Label - Operating Instructions	2
82544	Danger - Electrocution Hazard	3
82545	Danger - Maximum Load, 227 kg	1
82548	Warning - Platform Rotate	2
82602	Danger - Max Manual Force, 667 N	1
82604	Danger - Max Manual Force, 400 N	1
82634	Label - Tire Pressure	4
82635	Label - Wheel Load, Z-45/25DC	4
82647	Label - Drive Enable Patch	1

DECALS



Platform



Specifications

Model	Z-45/25 DC (no jib)	
Height, working maximum	51 ft 5 in	15.7 m
Height, platform maximum	45 ft 5 in	13.8 m
Height, stowed maximum	6 ft 7 in	2.0 m
Horizontal reach maximum	24 ft 6 in	7.5 m
Width	5 ft 9 in	1.8 m
Length, stowed	18 ft	5.5 m
Maximum load capacity	500 lbs	227 kg
Wheelbase	6 ft 8 in	2.0 m
Turning radius (outside)	14 ft	4.3 m
Turning radius (inside)	5 ft	1.5 m
Turntable rotation (degrees)	359°	
Turntable tailswing	0 in	0 cm
Power source	8 Group-4H, 6V 315AH Batteries	
Drive speed, stowed	3.0 mph 40 ft/9 sec	4.8 km/h 12.2 m/9 sec
Drive speed, booms raised	0.6 mph 40 ft/45 sec	1 km/h 12.2 m/45 sec
Airborne noise emissions Maximum sound level at normal operating workstations (A-weighted)	73 dB	
Weight	See Serial Plate (Machine weights vary with option configurations)	
Platform dimensions, 6 foot (length x width)	72 in x 30 in 1.8 m x 76 cm	
Platform leveling	self-leveling	
Platform rotation	180 degrees	
Controls	24V DC proportional	
AC outlet in platform	standard	
Hydraulic pressure, maximum (boom functions)	3200 psi	221 bar

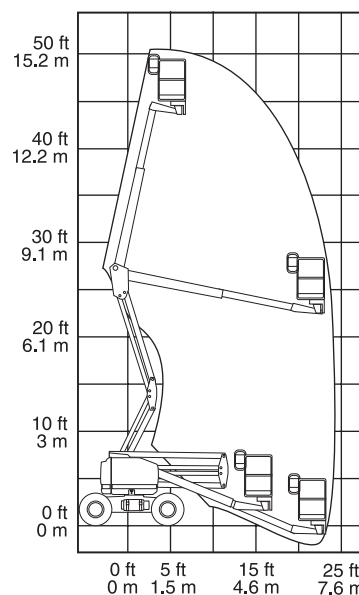
System voltage	48V	
Tire size, 2WD Industrial	9-14.5 LT	
Gradeability, stowed, 2WD	30%	
Ground clearance, minimum	7 in	17.8 cm

Floor Loading Information

GVW+Rated Load	16,400 lbs	7439 kg
Axle load, maximum	12,300 lbs	5577 kg
Wheel load, maximum	7400 lbs	3355 kg
Localized pressure per tire	100 psi	7.03 kg/cm ² 690 kPa
Occupied pressure	307 psf	13.45 kPa

Note: Floor loading information is approximate and does not incorporate different option configurations. It should be used only with adequate safety factors.

¹ Outreach specification with platform rotated 90 degrees



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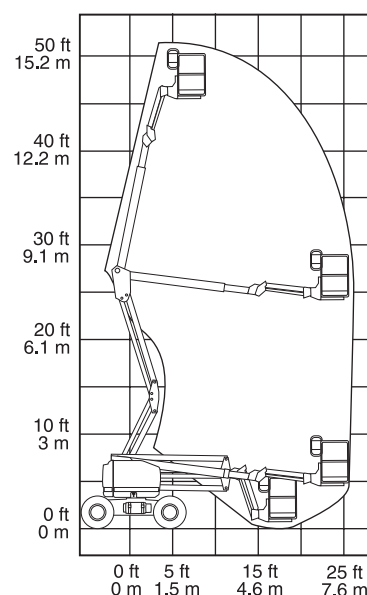
Model		Z-45/25J DC (jib)	
Height, working maximum	51 ft 3 in	15.6 m	
Height, platform maximum	45 ft 3 in	13.8 m	
Height, stowed maximum	6 ft 7 in	2.0 m	
Horizontal reach maximum	25 ft 3 in	7.7 m	
Width	5 ft 9 in	1.8 m	
Length, stowed	22 ft 3 in	6.8 m	
Maximum load capacity	500 lbs	227 kg	
Wheelbase	6 ft 8 in	2.0 m	
Turning radius (outside)	14 ft	4.3 m	
Turning radius (inside)	5 ft	1.5 m	
Turntable rotation (degrees)		359°	
Turntable tailswing	0 in	0 cm	
Power source	8 Group-4H, 6V 315AH Batteries		
Drive speed, stowed	3.0 mph 40 ft/9 sec	4.8 km/h 12.2 m/9 sec	
Drive speed, booms raised	0.6 mph 40 ft/45 sec	1 km/h 12.2 m/45 sec	
Airborne noise emissions Maximum sound level at normal operating workstations (A-weighted)	73 dB		
Weight	See Serial Plate (Machine weights vary with option configurations)		
Platform dimensions, 6 foot (length x width)	72 in x 30 in 1.8 m x 76 cm		
Platform leveling	self-leveling		
Platform rotation	180 degrees		
Controls	24V DC proportional		
AC outlet in platform	standard		
Hydraulic pressure, maximum (boom functions)	3200 psi	221 bar	

System voltage	48V	
Tire size, 2WD Industrial	9-14.5 LT	
Gradeability, stowed, 2WD	30%	
Ground clearance, minimum	7 in	17.8 cm

Floor Loading Information

GVW+Rated Load	16,600 lbs	7530 kg
Axle load, maximum	12,700 lbs	5759 kg
Wheel load, maximum	7400 lbs	3355 kg
Localized pressure per tire	100 psi	7.03 kg/cm ² 690 kPa
Occupied pressure	311 psf	15.16 kPa

Note: Floor loading information is approximate and does not incorporate different option configurations. It should be used only with adequate safety factors.



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